USTs

Summary of Federal Regulations for Underground Storage Tank Systems

PART 280
TECHNICAL STANDARDS AND CORRECTIVE ACTION REQUIREMENTS FOR OWNERS AND OPERATORS OF UNDERGROUND STORAGE TANKS (USTs)

- Subpart A — Program Scope and Interim Prohibition
- Subpart B — UST Systems: Design, Construction, Installation and Notification
- Subpart C — General Operating Requirements
- Subpart D — Release Detection
- Subpart E — Release Reporting, Investigation, and Confirmation
- Subpart F — Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances
- Subpart G — Out-of-Service UST Systems and Closure
- Subpart H — Financial Responsibility
- Subpart I — Lender Liability

Subpart A: Program Scope and Interim Prohibition

- Exceptions: Tank used for storing heating oil for consumptive use on the premises where stored.
- Deferrals: Leak detection does not apply to any UST system that stores fuel solely for use by emergency power generators.
- Vehicle Maintenance Facilities: Must follow all rules

Subpart B: UST Systems: Design, Construction, Installation and Notification

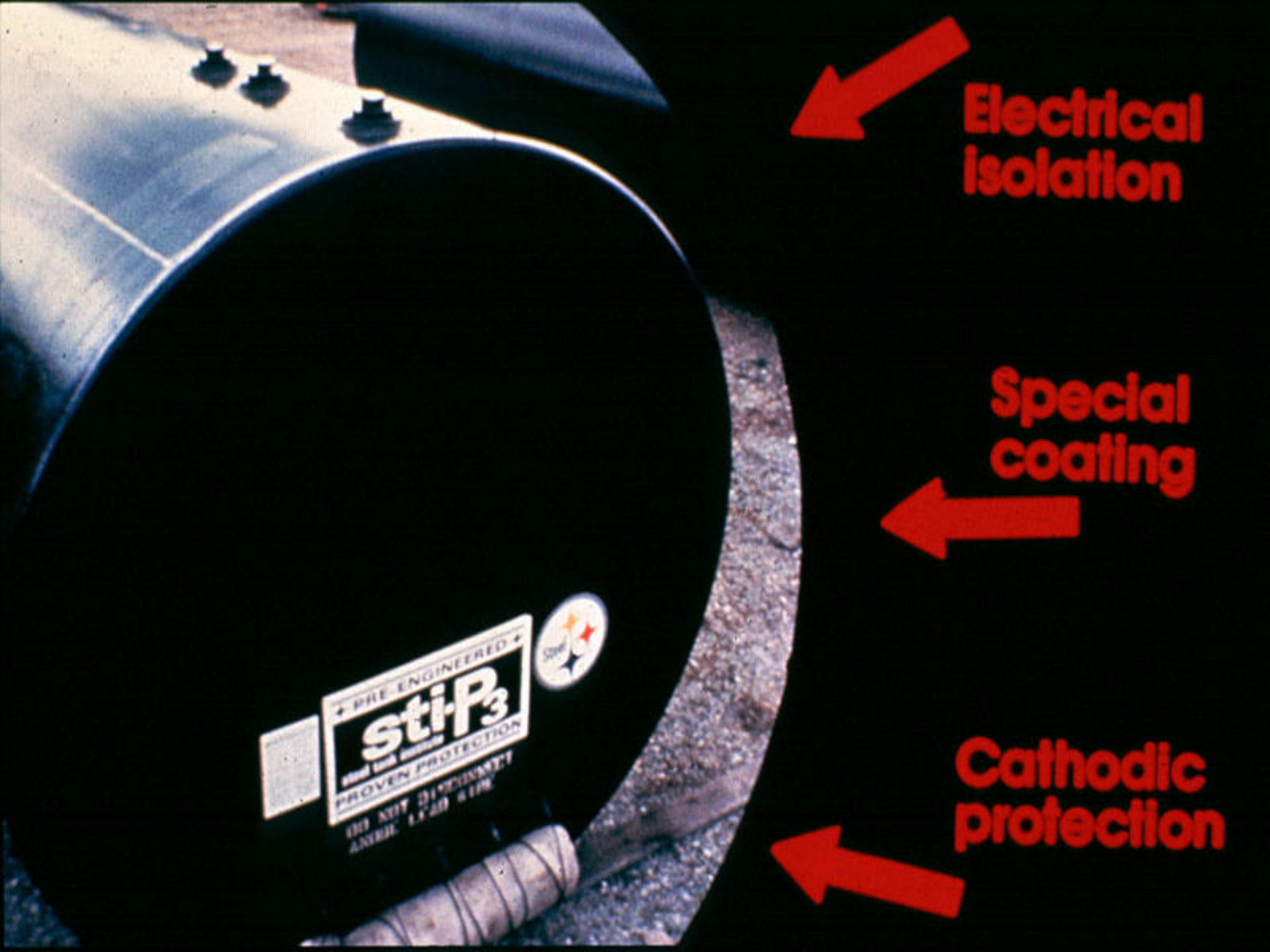
- All regulated tanks must be registered with State
- Upgrading: Deadline - Dec 22, 98
  - Protected against corrosion

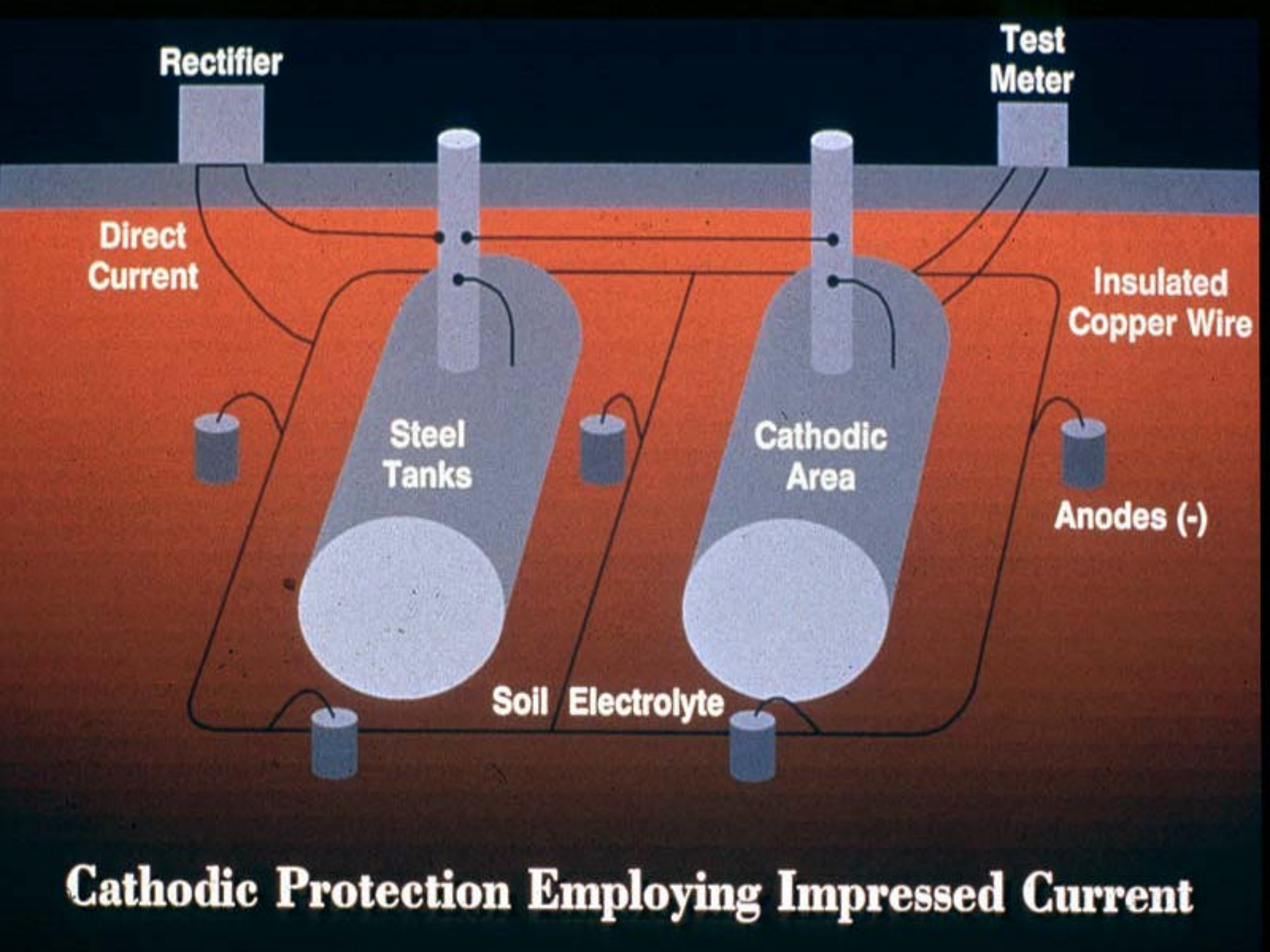
    Spill prevention

    Overfill prevention

Corrosion Protection

- Many Releases come from USTs damaged by corrosion
- Tank and piping need corrosion protection


Electrical isolation
Special coating
Cathodic protection
PRE-ENGINEERED
sti-P3
PROVEN PROTECTION

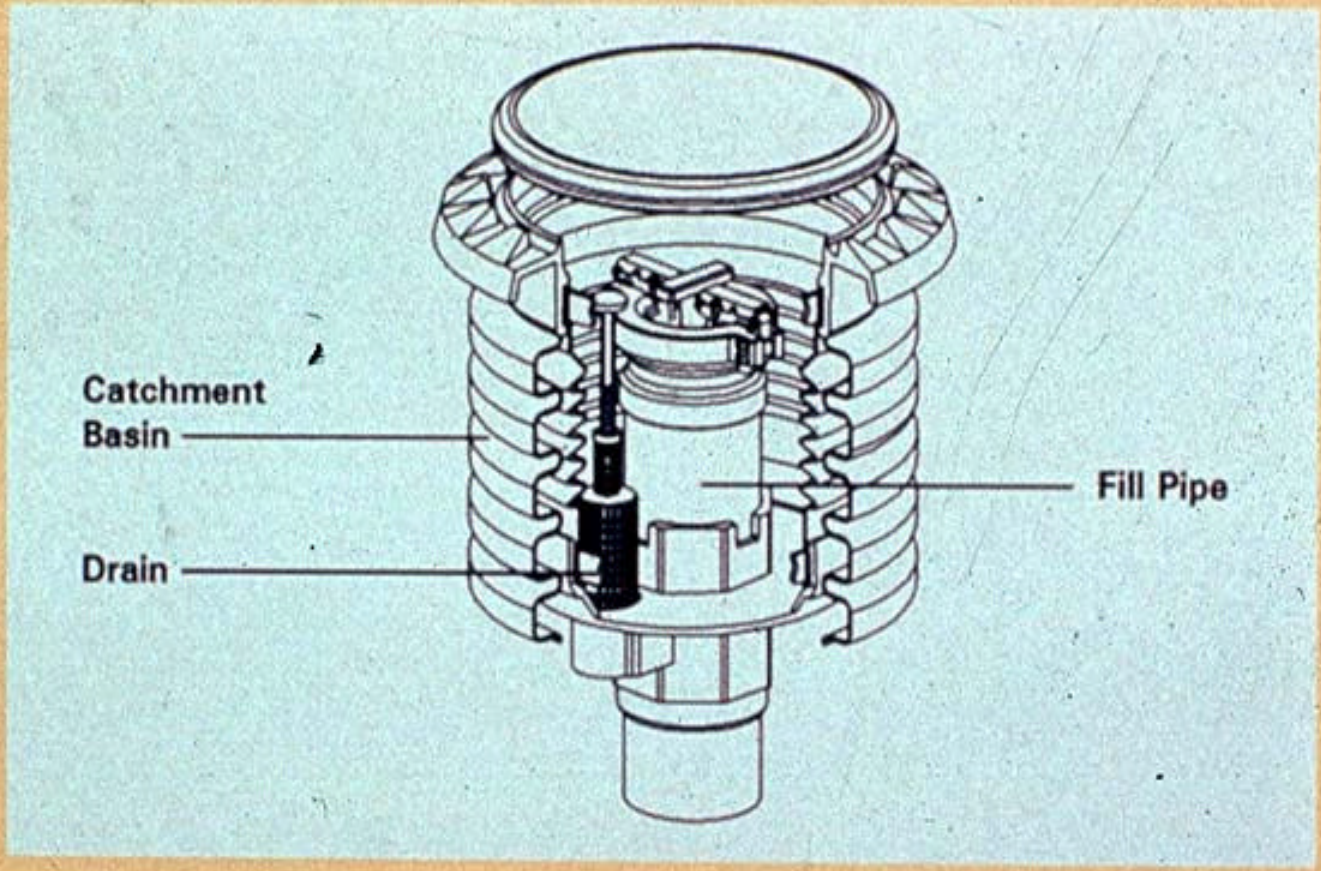


Cathodic Protection Employing Impressed Current

Spill Protection

- Use good filling practices to avoid the delivery mistakes that cause spills AND
- Add a spill bucket to each UST to catch spills

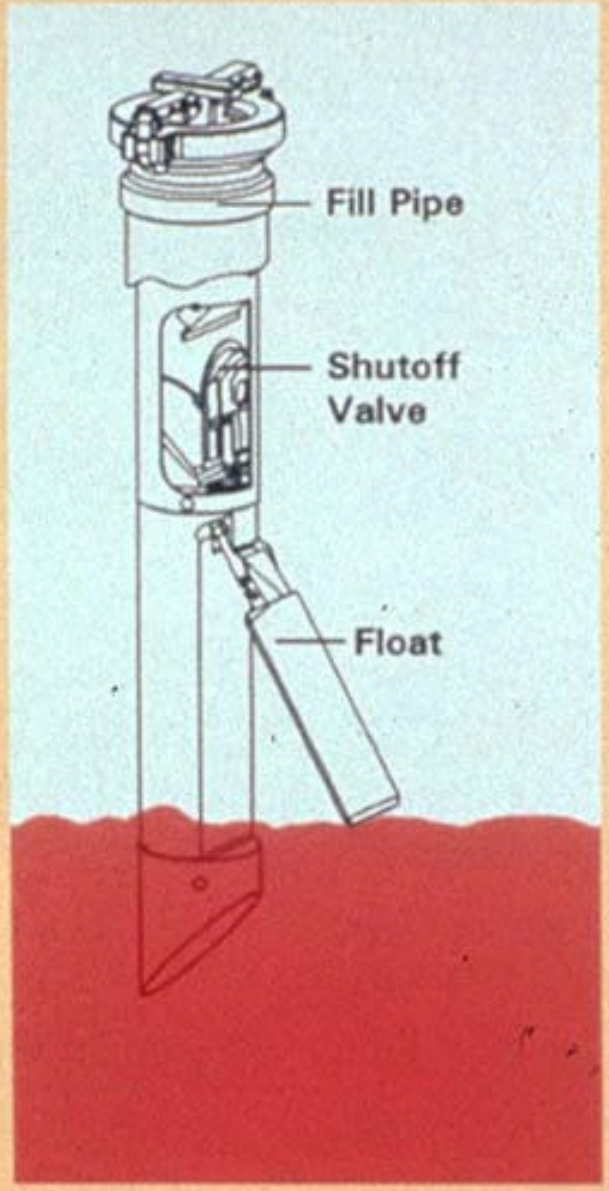
Spill Bucket



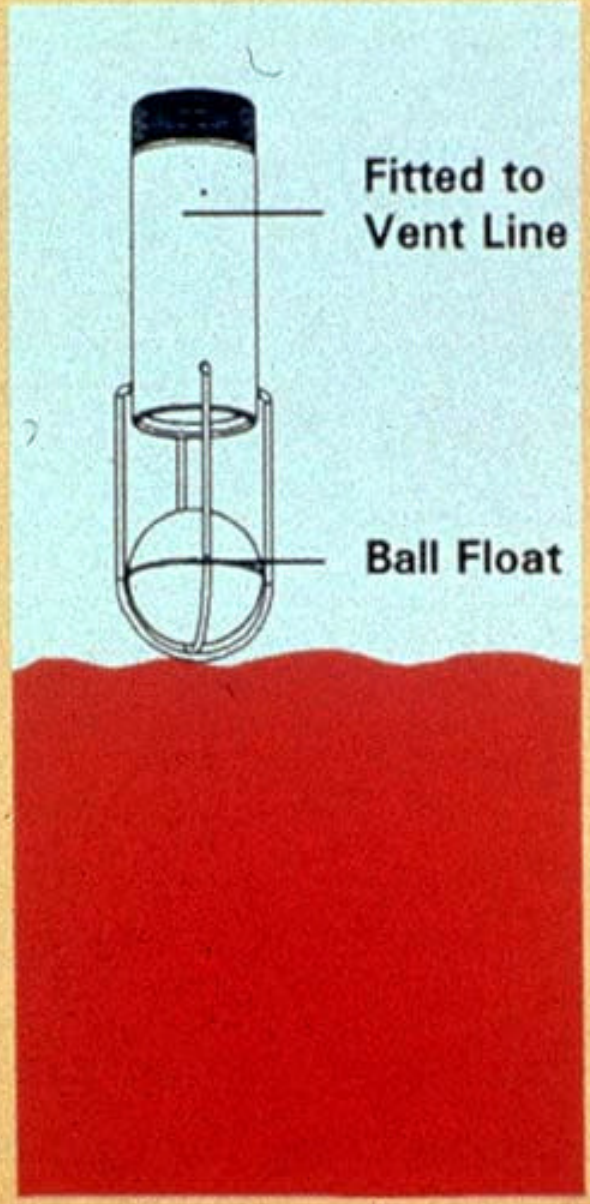
Overfill Protection

- Use good filling practices to avoid the delivery mistakes that cause overfills AND
- Add overfill protection equipment

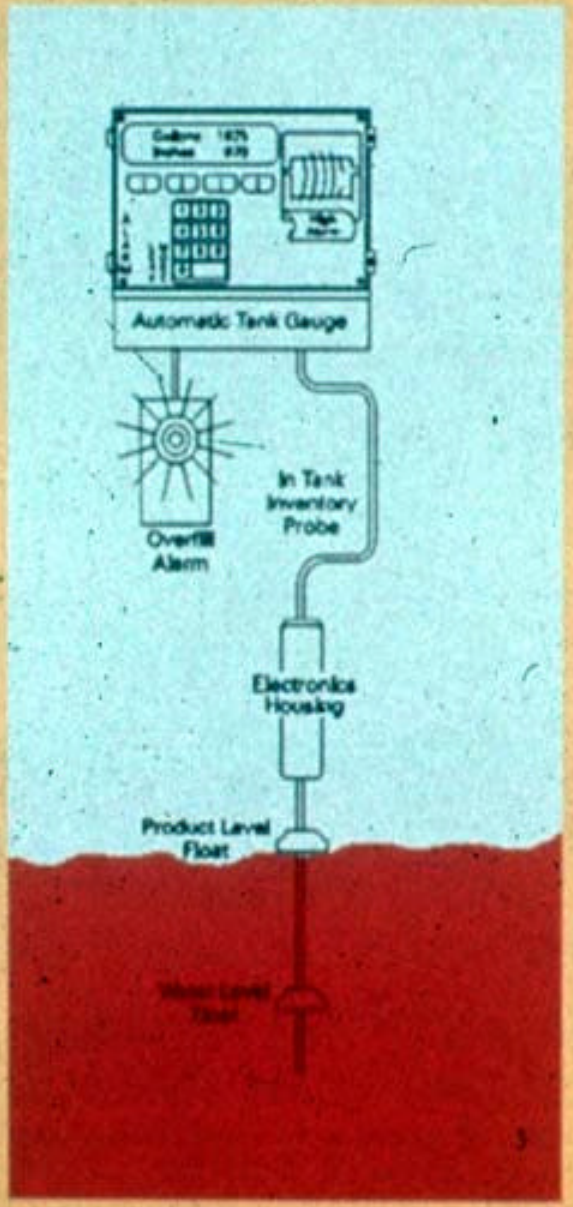
Overfill Device



Overfill Device



Overfill Device



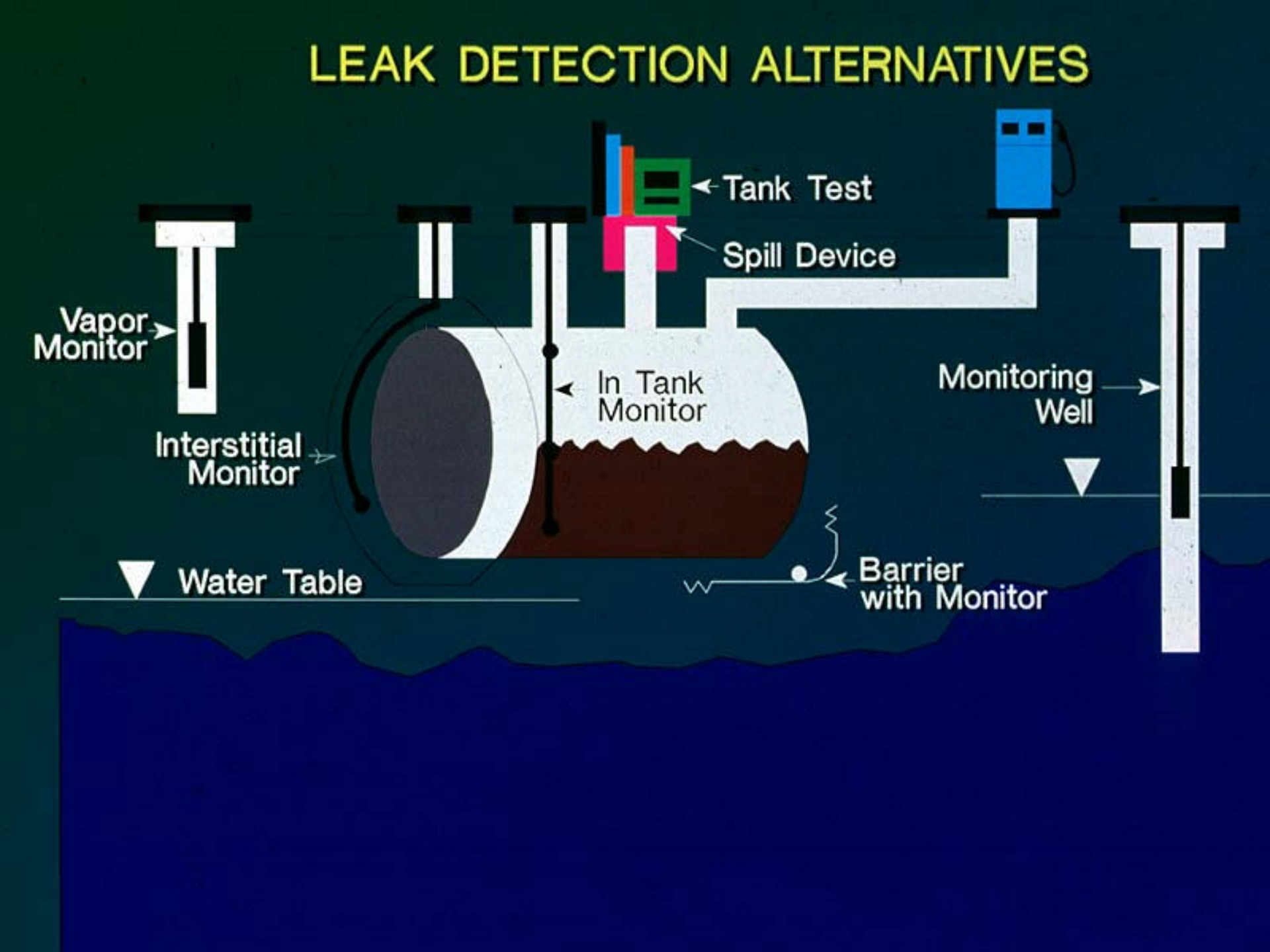
Subpart D
Release Detection

- Tanks: Must be monitored at least every 30 days for releases one of the approved methods
- Tanks less than 2K - MTG
- Piping: Must be monitored for releases in a manner that meets one of the following requirements:

(1) Pressurized piping must be equipped with an automatic line leak detector and have an annual line tightness test or conduct monthly monitoring (LLD must be function tested on an annual basis)

(2) Suction piping must be line tightness tested every three years or use a monthly monitoring method

(3) Safe suction piping requires no release detection


LEAK DETECTION ALTERNATIVES
Tank Test
Spill Device
Vapor Monitor
In Tank Monitor
Monitoring Well
Interstitial Monitor
Water Table
Barrier with Monitor


VEEDER-ROOT
JUN 16, 1998 11:40:45 PM
ALL FUNCTIONS NORMAL
ALARM
WARNING
POWER
TLS-350R

Subpart D
Release Detection

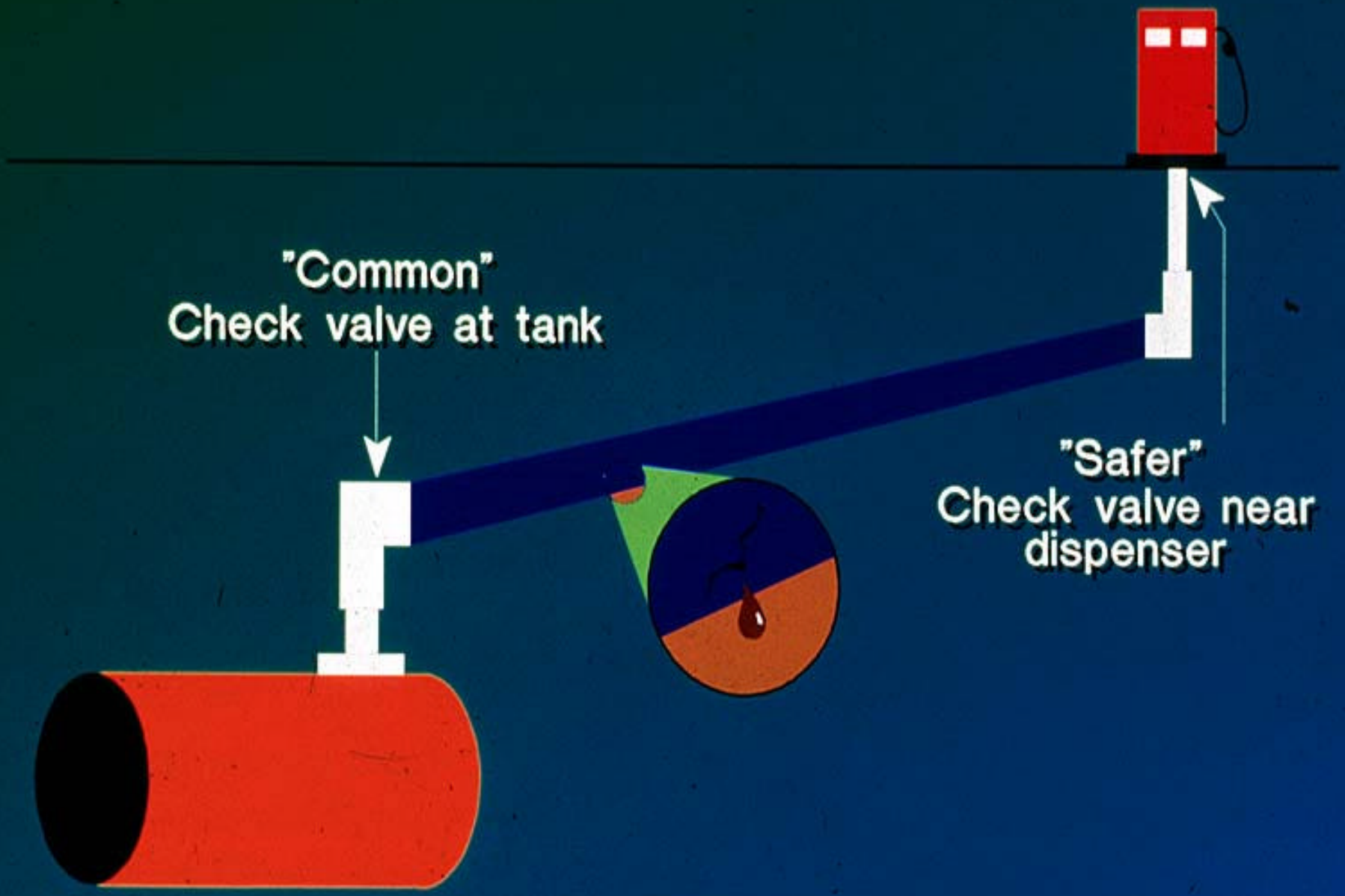
- Tanks: Must be monitored at least every 30 days for releases one of the approved methods
- Tanks less than 2K - MTG
- Piping: Must be monitored for releases in a manner that meets one of the following requirements:

(1) Pressurized piping must be equipped with an automatic line leak detector and have an annual line tightness test or conduct monthly monitoring (LLD must be function tested on an annual basis)

(2) Suction piping must be line tightness tested every three years or use a monthly monitoring method

(3) Safe suction piping requires no release detection

SUCTION PIPING



Subpart E
Release Reporting, Investigation, and Confirmation

Owners must report to the implementing agency within 24 hours:

a) any indication of a release
b) unusual operating conditions
c) sudden loss of product in UST system
d) unexplained presence of water in tank

Owners must immediately investigate and confirm all suspected releases within 7 days

Record Keeping

Tanks: Last 12 months of release detection results
Last tank tightness test (IC)

Piping: Last 12 months of release detection results
Last line tightness test
Last function test on line leak detector

Upgrading: Tank structural assessment
Tank lining certificate
Cathodic protection design and as-built drawings

Cathodic Protection:

Financial Responsibility:

Records must be kept at the UST site and immediately available for inspection or at an alternative site and provided for inspection upon request.

Record Keeping

- Cathodic protection must be tested within 6 months of its installation and every 3 years thereafter
- Keep results of the last 2 cathodic protection tests

Recording Keeping

- In addition, impressed current systems must be inspected every 60 days to make sure the equipment is running properly
- Keep results of the last 3 equipment inspections

Record Keeping

Tanks: Last 12 months of release detection results
Last tank tightness test (IC)

Piping: Last 12 months of release detection results
Last line tightness test
Last function test on line leak detector

Upgrading: Tank structural assessment
Tank lining certificate
Cathodic protection design and as-built drawings

Cathodic Protection:

Financial Responsibility:

Records must be kept at the UST site and immediately available for inspection or at an alternative site and provided for inspection upon request.

Contacts

- Iowa - Approved State
  - Iowa Department of Natural Resources
  - Jim Humeston (515)281-8135
  - EPA - Alan Hancock (913)551-7647
- Kansas - Approved State
  - Kansas Department of Health & Environment
  - Tom Winn (913)296-1678
  - EPA - Bjorn Brinkman (913)551-7761

Contacts

- Missouri - Unapproved State
  - Missouri Department of Natural Resources
  - Fred Hutson (573)751--6822
  - EPA - Jim Clemenson (913)551-7218
- Nebraska - Approval in process
  - Nebraska Department of Environmental Quality
  - UST: Clark Conklin (402) 471-9465
  - LUST:David Chambers (402)471-4230
  - EPA - Linda Garwood (913)551-7268

Contacts

- EPA Tribal Contacts
- UST: Ed Wakeland (913)551-7806
- LUST: Alan Hancock (913)551-7647